

DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)

**BOARD AND CODE ADMINISTRATION DIVISION** 

# **NOTICE OF ACCEPTANCE (NOA)**

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/pera/

Efco Corporation 1000 County Road, P.O. Box 609 Monett, MO 65708-0609

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series 5600-6" Deep Frame - Aluminum Curtain Wall System - L.M.I.

APPROVAL DOCUMENT: Drawing No. 1090, titled "6" Deep Series 5600 Large Missile Impact Curtain Wall System", sheets 1 through 9 of 9, dated 02/06/02 with revision C1 dated 09/30/11, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

# MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA revises and renews NOA # 07-0305.05 and consists of this page 1 and evidence pages E-1, E-2, E-3, E-4, and E-5, as well as approval document mentioned above. The submitted documentation was reviewed by **Manuel Perez, P.E.** 

MIAMI-DADE COUNTY
APPROVED

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#### A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No. 1090, titled "6" Deep Series 5600 Large Missile Impact Curtain Wall System", sheets 1 through 9 of 9, dated 02/06/02, with revision C1 dated 09/30/11, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.

### B. TESTS

- 1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Small Missile Impact Test per FBC, TAS 201-94
  - 5) Large Missile Impact Test per FBC, TAS 201-94
  - 6) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with installation diagram of a multiple span EFCO S5600 - 8" deep outsize glazed aluminum curtain wall system 202" wide x 341" high x 64" return, specimen # 1 (A-A1), Glass types: 1, 2, 4, 5, 6A & 8, marked-up by Hurricane Test Laboratory, Inc. Test Report No. HTL-0046-0413-01, dated 2/16-19/01, signed and sealed by Vinu J. Abraham, P.E.

(Submitted under previous NOA# 05-1212.11)

- 2. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94 along with installation diagram of a single span EFCO S5600 8" deep outsize glazed aluminum curtain wall system 181-1/2" wide x 150" high, specimen # 9 (B1), Glass types: 3 & 5, marked-up by Hurricane Test Laboratory, Inc. Test Report No. HTL-0046-0816-01, dated 8/24-27/01, signed and sealed by Vinu J. Abraham, P.E.

(Submitted under previous NOA# 05-1212.11)

- 3. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Large Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with installation diagram of a single span EFCO S5600 – 8" deep outsize glazed aluminum curtain wall system 181-1/2" wide x 121-3/4" high, specimen # 3 (B3), Glass types: 6 & 7, marked-up by Hurricane Test Laboratory, Inc. Test Report No. HTL-0046-0816-01, dated 8/14-15/01, signed and sealed by Vinu J. Abraham, P.E. (Submitted under previous NOA# 05-1212.11)

Manuel Perez, P.E. Product Control Examiner

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- B. TESTS (CONTINUED)
  - 4. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
    - 2) Large Missile Impact Test per FBC, TAS 201-94
    - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with installation diagram of a single span EFCO S5600 – 7" deep outsize glazed aluminum curtain wall system 181-1/2" wide x 121-3/4" high, specimen # 6 (C), Glass types: 1, 3A & 4, marked-up by Hurricane Test Laboratory, Inc. Test Report No. HTL-0046-0413-01, dated 4/26-27/01, signed and sealed by Vinu J. Abraham, P.E. (Submitted under previous NOA# 05-1212.11)

- 5. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with installation diagram of a single span EFCO S5600 – 6" deep outsize glazed aluminum curtain wall system 181-1/2" wide x 169-1/4" high, specimen # 2 (D), Glass types: 1, 4 & 5, marked-up by Hurricane Test Laboratory, Inc. Test Report No.

HTL-0046-0816-01, dated 8/13-16/01, signed and sealed by Vinu J. Abraham, P.E. (Submitted under previous NOA# 05-1212.11)

- 6. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with installation diagram of a single span EFCO S5600 – 8" deep outsize glazed aluminum curtain wall system 181-1/2" wide x 121-3/4" high, specimen # 4 (E), Glass type: 5, marked-up by Hurricane Test Laboratory, Inc. Test Report No.

**HTL-0046-0816-01,** dated 8/16-17/01, signed and sealed by Vinu J. Abraham, P.E. (Submitted under previous NOA# 05-1212.11)

- 7. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
  - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 3) Water Resistance Test, per FBC, TAS 202-94
  - 4) Small Missile Impact Test per FBC, TAS 201-94
  - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with installation diagram of a single span  $\overline{EFCO}$  S5600 – 8" deep outsize glazed aluminum curtain wall system 181-1/2" wide x 121-3/4" high, specimen # 1 (F), Glass type: 2, marked-up by Hurricane Test Laboratory, Inc. Test Report No.

**HTL-0046-0517-01,** dated 5/11-17/01, signed and sealed by Vinu J. Abraham, P.E. (Submitted under previous NOA# 05-1212.11)

Product Control Examiner NOA No. 11-1027.19

- B. TESTS (CONTINUED)
  - 8. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
    - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
    - 3) Water Resistance Test, per FBC, TAS 202-94
    - 4) Small Missile Impact Test per FBC, TAS 201-94
    - 5) Large Missile Impact Test per FBC, TAS 201-94
    - 6) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with installation diagram of a single span EFCO S5600 – 8" deep outsize glazed aluminum curtain wall system 181-1/2" wide x 116" high, specimen # 5 (G), Glass types: 2, 4 & 5, marked-up by Hurricane Test Laboratory, Inc. Test Report No. HTL-0046-0816-01, dated 8/20/01, signed and sealed by Vinu J. Abraham, P.E. (Submitted under previous NOA# 05-1212.11)

- 9. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Small Missile Impact Test per FBC, TAS 201-94
  - 4) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with installation diagram of a single span EFCO S5600 – 8" deep outsize glazed aluminum curtain wall system 181-1/2" wide x 150" high, specimen # 6b (H), Glass types: 2, 4 & 5, marked-up by Hurricane Test Laboratory, Inc. Test Report No. HTL-0046-0816-01, dated 8/21-23/01, signed and sealed by Vinu J. Abraham, P.E. (Submitted under previous NOA# 05-1212.11)

- 10. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Small Missile Impact Test per FBC, TAS 201-94
  - 4) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with installation diagram of a single span EFCO S5600 – 6" deep outsize glazed aluminum curtain wall system 181-1/2" wide x 98" high, specimen #8 (J), Glass types: 1, 2 & 5, marked-up by Hurricane Test Laboratory, Inc. Test Report No. HTL-0046-0816-01, dated 8/23-24/01, signed and sealed by Vinu J. Abraham, P.E. (Submitted under previous NOA# 05-1212.11)

- 11. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Small Missile Impact Test per FBC, TAS 201-94
  - 4) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with installation diagram of a single span EFCO S5600 – 8" deep outsize glazed aluminum curtain wall system 181-1/2" wide x 150" high, specimen # 6a (K), Glass types: 2, 4 & 5, marked-up by Hurricane Test Laboratory, Inc. Test Report No. HTL-0046-0816-01, dated 8/21-23/01, signed and sealed by Vinu J. Abraham, P.E.

(Submitted under previous NOA# 05-1212.11)

Manuel Perez, P.E. Product Control Examiner NOA No. 11=1027,19

Expiration Date: June 27, 2017

Approval Date: February 16, 2012

- B. TESTS (CONTINUED)
  - 12. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
    - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
    - 3) Water Resistance Test, per FBC, TAS 202-94
    - 4) Large Missile Impact Test per FBC, TAS 201-94
    - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with installation diagram of a single span EFCO S5600 – 6" deep outsize glazed aluminum curtain wall system 181-1/2" wide x 112" high, specimen # 7 (L), Glass type: 5, marked-up by Hurricane Test Laboratory, Inc. Test Report No.

**HTL-0046-0816-01**, dated 8/21-22/01, signed and sealed by Vinu J. Abraham, P.E. (Submitted under previous NOA# 05-1212.11)

- 13. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94 along with installation diagram of a single span EFCO S5600 8" deep outsize glazed aluminum curtain wall system 181-1/2" wide x 121-3/4" high, specimen # 1 (M), Glass type: 6a, marked-up by Hurricane Test Laboratory, Inc. Test Report No. HTL-0046-1004-01, dated 10/17/01, signed and sealed by Vinu J. Abraham, P.E. (Submitted under previous NOA# 05-1212.11)
- 14. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94 along with installation diagram of a three-bay specimen of a series S5600 8" deep outside glazed curtain wall system, 176" wide x 128-1/2" high, specimen #1; prepared by Hurricane Test Laboratory, Test Report No. HTL-0046-1019-03, Elevation A, dated 10/20/03, signed and sealed by Vinu J. Abraham, P.E.

(Submitted under previous NOA# 05-1212.11)

- 15. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
  - 2) Large Missile Impact Test per FBC, TAS 201-94
  - 3) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with installation diagram of a three-bay specimen of a series S5600 6" deep outside glazed curtain wall system, 182-1/2" wide x 98" high, specimen #2; prepared by Hurricane Test Laboratory, Test Report No. HTL-0046-0113-04, Elevation C, dated 01/09-12/04, signed and sealed by Vinu J. Abraham, P.E.

(Submitted under previous NOA# 05-1212.11)

Manuel Perez, P.E. Product Control Examiner NOA No. 11-1027.19

# **Efco Corporation**

## **NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

### C. CALCULATIONS:

- 1. Anchor verification calculations and structural analysis, complying with FBC-2007 and 2010, dated 08/31/06, and revised and updated on 09/29/11, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.
- 2. Glazing complies with ASTM E1300-04

# D. QUALITY ASSURANCE

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).

#### E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 11–0624.02 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont SentryGlas® Interlayer" dated 08/25/11, expiring on 01/14/17.
- 2. Notice of Acceptance No. 07-1116.11 issued to Saf-Glas, LLC for their "SAF-GLAS Polycarbonate Laminate", dated 12/27/07, expiring on 12/16/12.
- 3. Notice of Acceptance No. 08-0508.02 issued to Viracon, Inc. for their "StormGuard Glass Interlayer", dated 07/03/08, expiring on 04/14/13.
- 4. Notice of Acceptance No. 08–1118.07 issued to Oldcastle Glass Inc. for their "StormGlass Glass Interlayer", dated 03/05/09, expiring on 12/11/13.

### F. STATEMENTS

- 1. Statement letter of conformance, complying with FBC-2007 and FBC-2010, dated 09/28/11, signed and sealed by Warren W. Schaefer, P.E.
- 2. Statement letter of no financial interest, dated 09/28/11, signed and sealed by Warren W. Schaefer, P.E.
- 3. Laboratory compliance letter for Test Reports No. HTL-0046-0413-01, HTL-0046-0517-01 & HTL-0046-0816-01 issued by Hurricane Test Laboratory, Inc., dated October 23, 2001, signed and sealed by Vinu J. Abraham, P.E. (Submitted under previous NOA # 05-1212.11)
- 4. Proposal No. 01-0092, acceptance letter dated July 30, 2001, issued by this Office and signed by Jaime D. Gascon.

  (Submitted under previous NOA # 05-1212.11)

#### G. OTHERS

1. Notice of Acceptance No. **07-0305.05**, issued to EFCO Corporation for their Series 5600 – 6" Deep Frame - Aluminum Curtain Wall System – L.M.I., approved on 05/10/07 and expiring on 06/27/12.

Product Control Examiner
NOA No. 11-1927-19

















